

TI-3253Z

Figure 1

(Prelab)

10



Processor

13

Memory

14

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150

a.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
$x^2 - 3 \cdot x = 4$				
102				
104				
106				
109				
110				
MAIN	RAD AUTO	FUNC	1/1	

b.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
SELECT TRANSFORMATION				
$x^2 - 3 \cdot x = 4$				
1: add ? to each side				
2: multiply each side by ?				
3: switch sides				
4: factor left-hand side				
5: complete the square				
6: enter subexpr selection				
TYPE OR USE ←↑↓→ (ENTER) OR (ESC)				

c.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
add ? to each side				
$x^2 - 3 \cdot x = 4$				
? = -4				
ENTER=OK ESC=CANCEL				
MAIN	RAD AUTO	FUNC	1/1	

d.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
$x^2 - 3 \cdot x = 4$				
► add -4 to each side				
Press <ENTER>				
MAIN	RAD AUTO	FUNC	12/158	

e.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
$x^2 - 3 \cdot x = 4$				
► add -4 to each side				
$x^2 - 3 \cdot x + -4 = 4 + -4$				
MAIN	RAD AUTO	FUNC	1/1	

f.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
$x^2 - 3 \cdot x = 4$				
► add -4 to each side				
$x^2 - 3 \cdot x + -4 = 4 + -4$				
► simplify				
Press <ENTER>				
MAIN	RAD AUTO	FUNC	12/158	

g.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
$x^2 - 3 \cdot x = 4$				
► add -4 to each side				
$x^2 - 3 \cdot x + -4 = 4 + -4$				
► simplify				
$x^2 - 3 \cdot x - 4 = 0$				
MAIN	RAD AUTO	FUNC	1/1	

h.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
SELECT TRANSFORMATION				
$x^2 - 3 \cdot x - 4 = 0$				
1: add ? to each side				
2: multiply each side by ?				
3: switch sides				
4: factor left-hand side				
5: quadratic formula				
6: enter subexpr selection				
MAIN	RAD AUTO	FUNC	1/1	

i.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
$x^2 - 3 \cdot x + -4 = 4 + -4$				
► simplify				
$x^2 - 3 \cdot x - 4 = 0$				
► factor left-hand side				
$(x - 4) \cdot (x + 1) = 0$				
MAIN	RAD AUTO	FUNC	1/1	

j.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
SELECT TRANSFORMATION				
$(x - 4) \cdot (x + 1) = 0$				
1: add ? to each side				
2: multiply each side by ?				
3: switch sides				
4: factor left-hand side				
5: distribute multiplication				
6: (A+B) · C → A · C + B · C				
7: A · (B+C) → A · B + A · C				
MAIN	RAD AUTO	FUNC	1/1	

k.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
$x^2 - 3 \cdot x - 4 = 0$				
► factor left-hand side				
$(x - 4) \cdot (x + 1) = 0$				
► A · B = 0 → A = 0 or B = 0				
$x - 4 = 0$ or $x + 1 = 0$				
► solve linear equation				
$x = 4$ or $x = -1$				
MAIN	RAD AUTO	FUNC	1/1	

l.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
SELECT TRANSFORMATION				
$x - 4 = 0$ or $x + 1 = 0$				
1: solve linear equation				
2: enter subexpr selection				
TYPE OR USE ←↑↓→ (ENTER) OR (ESC)				

m.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
$(x - 4) \cdot (x + 1) = 0$				
► A · B = 0 → A = 0 or B = 0				
$x - 4 = 0$ or $x + 1 = 0$				
► solve linear equation				
$x = 4$ or $x = -1$				
MAIN	RAD AUTO	FUNC	1/1	

n.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
$x^2 - 3 \cdot x - 4 = 0$				
► quadratic formula				
$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$				
$x = \frac{-(-3) \pm \sqrt{(-3)^2 - 4 \cdot 1 \cdot -4}}{2 \cdot 1}$				
► simplify				
$x = 4$ or $x = -1$				
MAIN	RAD AUTO	FUNC	1/1	

o.

F1- Prob Set Prob	F2- F3 d+b	F4- Trans	F5- ?	F6- F7- Tools
P1: Solve for x				
► quadratic formula				
$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$				
$x = \frac{-(-3) \pm \sqrt{(-3)^2 - 4 \cdot 1 \cdot -4}}{2 \cdot 1}$				
► simplify				
$x = 4$ or $x = -1$				
MAIN	RAD AUTO	FUNC	1/1	

Figure 3

Figure 3

P3: Solve for x
 $x^2 - 3 \cdot x = 4$
 ► add -4 to each side
 $x^2 - 3 \cdot x + -4 = 4 + -4$
 ► simplify
 $x^2 - 3 \cdot x - 4 = 0$

Use <right>/<left>, Shift<right>/Shift<left>, Esc, F3, F4, F7

(a)

SELECT TRANSFORMATION
 $x^2 - 3 \cdot x - 4$
 1:factor
 2:H-B → H+ -B
 3:exit subexpr selection
 4:rewrite as ?

TYPE OR USE ##1 + (ENTER) OR (ESC)

(b)

P3: Solve for x
 $x^2 - 3 \cdot x = 4$
 ► add -4 to each side
 $x^2 - 3 \cdot x + -4 = 4 + -4$
 ► simplify
 $x^2 - 3 \cdot x - 4 = 0$

MAIN RAD AUTO FUNC 2/3

(c)

SELECT TRANSFORMATION
 $-3 \cdot x$
 1:arithmetic
 2:(-H)·B → -(H·B)
 3:arith, -, 0 & 1 ident
 4:H·B → B·H
 5:exit subexpr selection
 6:rewrite as ?

TYPE OR USE ##1 + (ENTER) OR (ESC)

(d)

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